

REMARKS:

The Office Action dated December 23, 2003 has been received and carefully reviewed. Reconsideration of the present application is respectfully requested in view of the above amendments and the remarks below.

Claims 1 and 4-19 are pending are pending in the application. Claims 1, 4 and 13 are in independent format. Claims 2 and 3 have previously been canceled.

Applicants note with appreciation the Examiner's indication that Claims 13-19 are considered allowable and that Claims 7-10 would be allowable if rewritten independently. Accordingly, Claims 7-10 have been amended to incorporate all the elements of their parent claim (Claim 4). No intervening claims are involved. As amended, Claims 7-10 are believed to be in condition for allowance.

Claims 1 and 4-6 were rejected under 35 U.S.C. § 102(b) over the Vlarr reference.

Please cancel Claim 1 without prejudice.

Claim 4 is directed to a method for encrypting and retrieving a data word using a two dimensional grid of boxes on an encryption sheet and essentially comprising the steps of: selecting a master word; recording the master word on the encryption sheet in a scrambled sequence along a master line of grid boxes; recording the data word along a data line of boxes in the same scrambled sequence as the master word by a fixed geometric offset of each of the data characters to at least one master character; and retrieving the data word by finding the master characters and locating the data characters by reference to the fixed geometric offset of the data characters to the master characters.

The Vlarr '755 reference discloses an encryption device including an envelope 5 with two dimensional grids 17, a numeric window 9, and an alphabetic window 7. The alphabetic window is marked by rows of alphabetic characters along its top and bottom edges. An encoder card 3 has an index mark 11 aligned with the alphabetic window 7 and line of a repeating sequence of numerals (0-9) aligned with the numeric window 9. Vlarr gives an example to show how a four letter master code word (BRIL) is used to encode the data word or PIN number "1166" onto the device. Referring to Fig. 2, the card 3 is moved to align the index mark 11 with the letter "B" along the alphabetic window 7, and the location of the numeral "1" to be encoded is noted in the numeric window 9. A mark is then recorded in the first row of a grid 17 at a column which aligns with the numeral "1" in the numeric window 9. The card 3 would then be moved to align the index mark 11 with the letter "R" in the alphabetic window 7, and a mark would be recorded in the second row of the grid 17 which aligns with the numeral "1" as currently positioned in the numeric window 9. The process would be repeated for the remaining numerals to be encoded.

There is no disclosure or suggestion in Vlarr of actually "recording said master word on said encryption sheet" and "recording said data word along a data line of boxes" as specifically called for in claim 4. There is no suggestion to actually record the master word on any part of Vlarr's card 3 or the envelope 5, as called for in Claim 4. Vlarr's master word is only remembered by the user. Similarly, Vlarr does not disclose or suggest actually recording the data word on the card or envelope, as specifically called

for in Claim 4. Since neither the master word nor the data word is actually recorded on Vlarr's card or envelope, there can be no fixed geometric offset between the characters of Vlarr's master word or data word, as called for in Claim 4. Vlarr only records marks indicating the geometric relationship between each letter of the master word as positioned along the alphabetic window 7 and its corresponding numeral of the data string as positioned within the numeric window 9, a relationship which changes from letter/numeral set to letter/numeral set, but does not record the actual master word and data word.

Since Vlarr does not disclose or suggest the actual recording of a master word in a scrambled sequence and a data word in the same scrambled sequence with a fixed geometric offset between each data character and at least one of the master characters, as called for in Claim 4, applicants urge that Claim 4 is neither anticipated by Vlarr nor made obvious by Vlarr, either alone or in combination with other cited references. Therefore, applicants believe that Claim 4 should be allowable.

Claims 5, 6, 11, and 12 all depend from Claim 4 and add additional steps to the method defined in Claim 4 and are believed to distinguish over Vlarr, Mosley '259 and the other cited references for the same reasons as Claim 4.

Claims 5, 6, 8, 11, 14, 15 and 17 were objected to because of use of the claim element identifier "(a)" for a single element. Accordingly, these claims have been amended to remove the reference to "(a)" for a single element.

The specification has been amended to add the missing figure descriptions for Figs. 9 and 10 in the "Brief Description of the Drawings" section of the specification.

Formal drawings are submitted herewith. In preparation of the formal drawings, care was taken to insure that all reference numerals recited in the specification are shown in the drawings. Specifically, the reference numeral 12 was added in Fig. 1 to identify the grid on the card 4. The Examiner seemed to suggest that reference numerals 14, 18 and 20 were missing from the drawings. Applicants believe that numeral 14 was originally shown in Fig. 1 and that numerals 18 and 20 were originally shown in Fig. 2d. In any case, numerals 14, 18, and 20 are now definitely shown in Fig. 2d. Annotated sheets showing in red ink the addition of numeral 12 in Fig. 1 and the locations of numerals 14, 18, and 20 in Fig. 2d are enclosed herewith. Applicants believe that the drawings, as amended, comply with 37 CFR §1.84(p)(5) and all other pertinent rules.

Applicants believe that none of the amendments to the specification, claims, or drawings add new matter to this application.

Claims 4-12, 14, 15, and 17 are presented for reconsideration. Applicants contend that said claims define methods for encryption which are not anticipated by or obvious from any of the references of record, either singly or in combination. Therefore, the allowance of Claims 4-12, 14, 15, and 17, along with Claims 13, 16, 18, and 19, is earnestly solicited.

Appl. No. 09/595,354
Amendment dated April 22, 2004
Reply to Office Action of December 23, 2003

In the event that the Examiner is of the opinion that the prosecution of this application can be advanced thereby, he is invited to contact Applicants' attorney at the telephone number listed below.

Respectfully submitted,

George S. Mentrup et al.

By



Marcia J. Rodgers
Reg. No. 33,765
Shughart Thomson & Kilroy, P.C.
120 West 12th Street
Kansas City, Missouri 64105
Tel: (816) 421-3355
Fax: (816) 374-0509

MJR:DAC/ih
attachments